

### REMARKS

In accordance with the foregoing, claims 1, 45, and 67 are amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-22 and 45-67 are pending and under consideration. Reconsideration is respectfully requested.

#### **Entry Of Response Under 37 C.F.R. §1.116:**

Claims 1, 45, and 67 are amended to recite, using claim 1 as an example, "extracting, as a topic of query, either a top level component of syntactic hierarchy of said search request sentence, in a case said search request sentence does not include an interrogative pronoun, or a component qualified by an interrogative pronoun, in a case said search request sentence includes the interrogative pronoun." (Amendatory language underlined).

Applicants request entry of this Rule §116 Response and Request for Reconsideration because:

- (a) it is believed that the amendment of claims 1, 45, and 67 puts this application into condition for allowance;
- (b) the amendment of claims 1, 45, and 67 should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and/or
- (c) the amendments do not significantly alter the scope of the claims and place the application at least into a better form for appeal.

The Manual of Patent Examining Procedures sets forth in §714.12 that "[a]ny amendment that would place the case either in condition for allowance or in better form for appeal may be entered." ( Underlining added for emphasis). Moreover, §714.13 sets forth that "[t]he Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

#### **Item 3: Rejection of claims 1-22 and 45-67 under 35 U.S.C. §112, second paragraph, as being indefinite**

In item 3 of the Office Action, the Examiner rejects claims 1-22 and 45-67 under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner asserts:

claims 1, 45, and 67 recite the limitation "extracting, as a topic of query, a top level component of syntactic hierarchy of said search request sentence in a case said search request sentence does not include an interrogative pronoun or extracting a component ... In a case said search request sentence includes the interrogative

pronoun" in para. 5 of the claims. The claims then go on to recite generating search criteria, searching the database and outputting the search results based on the topic of query extracted. It is unclear as to whether or not the topic of query is extracted only when the search request sentence includes the interrogative pronoun, in which case, all the limitations following that in para. 5 are not required when the search request sentence does include an interrogative pronoun.

(Action at pages 2-3).

Claims 1, 45, and 67, as amended herein recite, using claim 1 as an example, "extracting, as a topic of query, either a top level component of syntactic hierarchy of said search request sentence, in a case said search request sentence does not include an interrogative pronoun, or a component qualified by an interrogative pronoun, in a case said search request sentence includes the interrogative pronoun." Such an extracting is illustrated, for example, in FIG. 7.

#### Summary

Applicants submit that claims 1-22 and 45-67 comply with 35 U.S.C. §112, second paragraph and request the rejection be withdrawn.

**Item 4: Rejection of independent claims 1, 45, and 67 under 35 U.S.C. §103(a) as being unpatentable over Bessho et al. (U.S.P. 6,243,670) and in view of Ejerhed (U.S.P. 7,058,564)**

**Items 4-9: Rejection of dependent claims 2-22 and 44-66 under 35 U.S.C. §103(a) as being unpatentable over Bessho and in view of combinations of art Ejerhed, Ferrel et al. (U.S.P. 5,907,837), Rose (U.S.P. 5,752,244), Henkin et al. (U.S. Pub. 2002/0107735 A1), and Schultz (U.S.P. 5,640,553)**

In item 4 of the Office Action, the Examiner rejects independent claims 1, 45, and 67 under 35 U.S.C. §103(a) as being unpatentable over Bessho and in view of art Ejerhed, and in items 4-9 rejects dependent claims 2-22 and 44-66 under 35 U.S.C. §103(a) as being unpatentable over Bessho and in view of combinations of Ejerhed, Ferrel, Rose, Henkin et al., and Schultz. The Examiner concedes Bessho does not teach:

determining whether said search request sentence includes an interrogative pronoun and extracting a component qualified by an interrogative pronoun in a case said search request sentence includes the interrogative pronoun.

(Action at page 4).

However, the Examiner further asserts:

the following claimed limitations are not required by the amended independent claim as they stem from a situation where the search request sentence does not include the interrogative pronoun, i.e. the extracting, as a topic of query, a top level component of syntactic hierarchy of said search request sentence in a case said search request sentence does not include an interrogative pronoun; generating search criteria based on said topic of query extracted. . . .; searching said database using said generated search criteria . . .; determining an output

format of search results based on said topic of the query . . . ; and outputting . . . . Since Ejerhed (as stated below) discloses the situation where the search request sentence does include an interrogative pronoun, the aforementioned claim limitations are not addressed.

(Action at page 4).

In support of the rejection, the Examiner relies on Ejerhed for teaching features of "determining whether a search request sentence includes an interrogative pronoun and extracting a component qualified by an interrogative pronoun in a case said search request sentence includes the interrogative pronoun" and contends it would have been obvious:

to modify Bessho with the teachings of Ejerhed to include determining whether a search request sentence includes an interrogative pronoun and extracting a component qualified by an interrogative pronoun. . . . for the purpose of automatically finding answers to a natural language question.

(Action at page 5).

The rejections are traversed.

As provided in MPEP §2143.03 "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."

Applicants submit that even an *arguendo* combination of the cited art Ejerhard does not teach features recited by independent claims 1, 45, and 67 (and respective dependent claims).

Independent claim 1, as amended herein, recites a query-and-response processing method for receiving a search request concerning a query input by a user and searching a database to present search results to the user including:

(1) "analyzing a search request sentence provided by said user using syntactic parsing;" and further

(2) "analyzing an intention of the query based on the analyzed search request sentence," and wherein the analyzing comprises:

(2a) "determining whether said search request sentence includes an interrogative pronoun," and

(2b) "extracting, as a topic of query, either a top level component of syntactic hierarchy of said search request sentence, in a case said search request sentence does not include an interrogative pronoun, or a component qualified by an interrogative pronoun, in a case said search request sentence includes the interrogative pronoun;" and further

(3) generating search criteria based on said topic of query extracted in said analyzing the intention of query;" and further

(4) "searching said database using said generated search criteria and retrieving, as

search results, information that are intended for said topic of query;" and further

(5) "determining an output format of search results based on said topic of the query without further input by the user;" and further

(6) "outputting said search results that are selected items to be presented to the user." (emphasis added).

Independent claims 45 and 67, as amended herein, have similar recitations.

Applicants submit that even an *arguendo* combination of Bessho and Ejerhard does not teach the recited cases of:

"extracting, as a topic of query, a component qualified by an interrogative pronoun, in a case said search request sentence includes the interrogative pronoun" and further "generating search criteria based on said topic of query" (i.e., the component qualified by an interrogative pronoun) and further "searching said database using said generated search criteria and retrieving, as search results, information that are intended for said topic of query" (i.e., the component qualified by an interrogative pronoun); and further "determining an output format of search results based on said topic of the query (i.e., the component qualified by an interrogative pronoun) without further input by the user."

Applicants submits the Examiner appears to contend independent claims 1, 45, and 67 (before the amendment herein) either:

1) in a case a search request sentence does not include an interrogative pronoun then "extracting, as a topic of query, a top level component of syntactic hierarchy of said search request sentence" and further "generating search criteria based on said topic of query . . . searching said database using said generated search criteria . . . determining an output format of search results based on said topic of the query . . . and outputting said search results;" or

2) in a case a search request sentence includes the interrogative pronoun "extracting a component qualified by an interrogative pronoun" with no further action.

That is, Applicants submit that the Examiner's support for the rejection of independent claims 1, 45, and 67 was based by merely modifying Bessho with Ejerhard to also teach extracting a component qualified by an interrogative pronoun without any further operations regarding the topic of query.

However, even an *arguendo* combination of Bessho and Ejerhard does not teach features recited by independent claims 1, 45, and 67, all as amended herein, of further generating search criteria based on said topic of query where the component is qualified by an interrogative pronoun.

**Summary**

Since features recited by independent claims 1, 45, and 67 (and respective dependent claims) are not taught by the cited art, alone or in combination, and *prima facie* obviousness is not established, the rejection should be withdrawn and claims 1-22 and 45-67 allowed.

**CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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